

07/19 0540

OIEP

RAW SEQUENCE LISTING

DATE: 07/24/2001

PATENT APPLICATION: US/09/898,541

TIME: 11:18:13

Input Set : A:\Seq_1st.txt

Output Set : N:\CRF3\07242001\I898541.raw

SEQUENCE LISTING

ENTERED

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1 (1) GENERAL INFORMATION:
2   (i) APPLICANT: Houghton, Alan
3     Partida, Shirley M.
4     Xu, Yiquing
5     Wang, Jigun
6   (ii) TITLE OF INVENTION: Method and Reagents for Genetic
7     Immunization
8   (iii) NUMBER OF SEQUENCES: 26
9   (iv) CORRESPONDENCE ADDRESS:
10     (A) ADDRESSEE: Opedahl & Larson
11     (B) ADDRESS: PO Box 1270
12     (C) CITY: Prince
13     (D) STATE: OR
14     (E) COUNTRY: USA
15     (F) TEL: 504-481-8700
16   (v) COMPUTER READABLE FORM:
17     (A) MEDIUM TYPE: Diskette, 3.5 inch, 1.44 Mb
18     (B) COMPUTER: IBM Compatible
19     (C) OPERATING SYSTEM: DOS 5.0
20     (D) SOFTWARE: Word Perfect
21   (vi) CURRENT APPLICATION DATA:
C--> 22     (A) APPLICATION NUMBER: US/09/898,541
C--> 23     (B) FILING DATE: 02-Jul-2001
24     (C) CLASSIFICATION:
25   (vii) PRIOR APPLICATION DATA:
26     (A) APPLICATION NUMBER:
27     (B) FILING DATE:
28   (viii) ATTORNEY AGENT INFORMATION:
29     (A) NAME: Marina T. Larson
30     (B) REGISTRATION NUMBER: 32,038
31     (C) REFERENCE/DOCKET NUMBER: MSK.P-012
32   (ix) TELECOMMUNICATION INFORMATION:
33     (A) TELEPHONE: (71) 668-2050
34     (B) TELEFAX: (71) 668-2082
35     (C) TELEX:
36 (2) INFORMATION FOR SEQ ID NO: 1:
37   (i) SEQUENCE CHARACTERISTICS:
38     (A) LENGTH: 3
39     (B) TYPE: amino acid
40     (D) TOPOLOGY: linear
W--> 42   (ii) MOLECULE TYPE:
43     (A) DESCRIPTION: peptide
44   (iii) HYPOTHETICAL: no
45   (v) FRAGMENT TYPE: internal
46   (vi) ORIGINAL SOURCE:
47     (A) ORGANISM: Human

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48      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
49 Glu Ala Asn Glu Pro Leu Leu Thr Asp
50      1
51 (2) INFORMATION FOR SEQ ID NO: 2:
52      (i) SEQUENCE CHARACTERISTICS:
53          (A) LENGTH: 5
54          (B) TYPE: amino acid
55          (C) TOPOLOGY: linear
W--> 57      (ii) MOLECULE TYPE:
58          (A) DESCRIPTION: peptide
59      (iii) HYPOTHETICAL: no
60      (iv) FRAGMENT TYPE: internal
61      (vi) ORIGINAL SOURCE:
62          (A) ORGANISM: human
63      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
64 Glu Glu Lys Glu Pro Leu Leu Met Asp
65      1
66 (2) INFORMATION FOR SEQ ID NO: 3:
67      (i) SEQUENCE CHARACTERISTICS:
68          (A) LENGTH: 5
69          (B) TYPE: amino acid
70          (C) TOPOLOGY: linear
W--> 72      (ii) MOLECULE TYPE:
73          (A) DESCRIPTION: peptide
74      (iii) HYPOTHETICAL: no
75      (iv) FRAGMENT TYPE: internal
76      (vi) ORIGINAL SOURCE:
77          (A) ORGANISM: human
78      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
79 Asp Ser Pro Leu Leu
80      1
81 (2) INFORMATION FOR SEQ ID NO: 4:
82      (i) SEQUENCE CHARACTERISTICS:
83          (A) LENGTH: 6
84          (B) TYPE: amino acid
85          (C) TOPOLOGY: linear
W--> 87      (ii) MOLECULE TYPE:
88          (A) DESCRIPTION: peptide
89      (iii) HYPOTHETICAL: no
90      (iv) FRAGMENT TYPE: internal
91      (vi) ORIGINAL SOURCE:
92          (A) ORGANISM: human
93      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
94 Glu Asp Thr Pro Leu Leu
95      1
96 (2) INFORMATION FOR SEQ ID NO: 5:
97      (i) SEQUENCE CHARACTERISTICS:
98          (A) LENGTH: 12
99          (B) TYPE: amino acid
100

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101         (D) TOPOLOGY: linear
W--> 102     (ii) MOLECULE TYPE:
103         (A) DESCRIPTION: peptide
104     (iii) HYPOTHETICAL: no
105     (iv) FRAGMENT TYPE: internal
106     (v) ORIGINAL SOURCE:
107         (A) ORGANISM: human
108     (x) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
109 Pro Ser Arg Asp Arg Ser Arg His Asp Lys Ile His
110                                     10
111 (2) INFORMATION FOR SEQ ID NO: 6:
112     (1) SEQUENCE CHARACTERISTICS:
113         (A) LENGTH: 9
114         (B) TYPE: amino acid
115         (D) TOPOLOGY: linear
W--> 117     (ii) MOLECULE TYPE:
118         (A) DESCRIPTION: peptide
119     (iii) HYPOTHETICAL: no
120     (iv) FRAGMENT TYPE: internal
121     (v) ORIGINAL SOURCE:
122         (A) ORGANISM: human
123     (x) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
124 Ser Gly Gly Ser Gly Gly Ser Gly Gly
125                                     8
126 (2) INFORMATION FOR SEQ ID NO: 7:
127     (1) SEQUENCE CHARACTERISTICS:
128         (A) LENGTH: 19
129         (B) TYPE: nucleic acid
130         (C) STRANDEDNESS: single
131         (D) TOPOLOGY: linear
132     (ii) MOLECULE TYPE: genomic DNA
133     (iii) HYPOTHETICAL: no
134     (iv) ANTI-SENSE: yes
135     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
136 CGCCACCAGA CAATATAGC 19
137 (2) INFORMATION FOR SEQ ID NO: 8:
138     (1) SEQUENCE CHARACTERISTICS:
139         (A) LENGTH: 45
140         (B) TYPE: nucleic acid
141         (C) STRANDEDNESS: single
142         (D) TOPOLOGY: linear
143     (ii) MOLECULE TYPE: genomic DNA
144     (iii) HYPOTHETICAL: no
145     (iv) ANTI-SENSE: no
146     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
147 GCCTCCTGAA CTCTCGAAC CACCAGAAGG GGAAACACAT CTGCC 45
148 (2) INFORMATION FOR SEQ ID NO: 9:
149     (1) SEQUENCE CHARACTERISTICS:
150         (A) LENGTH: 43

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154          (B) TYPE: nucleic acid
155          (C) STRANDEDNESS: single
156          (D) TOPOLOGY: linear
157          (ii) MOLECULE TYPE: genomic DNA
158          (iii) HYPOTHETICAL: no
159          (iv) ANTI-SENSE: yes
160          (x) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
161 TGTGGTGGTT TGGAGGATC AGGAGGATC ATTACCATTG CTGTAGTG 48
162 (2) INFORMATION FOR SEQ ID NO: 10:
163     (i) SEQUENCE CHARACTERISTICS:
164         A) LENGTH: 22
165         B) TYPE: nucleic acid
166         C) STRANDEDNESS: single
167         D) TOPOLOGY: linear
168         (ii) MOLECULE TYPE: genomic DNA
169         (iii) HYPOTHETICAL: no
170         (iv) ANTI-SENSE: no
171         (x) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
172 GGTTCCTTCG TACCTCTTGG CG      22
173 (2) INFORMATION FOR SEQ ID NO: 11:
174     (i) SEQUENCE CHARACTERISTICS:
175         A) LENGTH: 19
176         B) TYPE: nucleic acid
177         C) STRANDEDNESS: single
178         D) TOPOLOGY: linear
179         (ii) MOLECULE TYPE: genomic DNA
180         (iii) HYPOTHETICAL: no
181         (iv) ANTI-SENSE: yes
182         (x) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
183 CGCCACCAGA CATATAAG      19
184 (2) INFORMATION FOR SEQ ID NO: 12:
185     (i) SEQUENCE CHARACTERISTICS:
186         A) LENGTH: 22
187         B) TYPE: nucleic acid
188         C) STRANDEDNESS: single
189         D) TOPOLOGY: linear
190         (ii) MOLECULE TYPE: genomic DNA
191         (iii) HYPOTHETICAL: no
192         (iv) ANTI-SENSE: no
193         (x) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
194 GGTTCCTTCG TACCTCTTGG CG      22
195 (2) INFORMATION FOR SEQ ID NO: 13:
200     (i) SEQUENCE CHARACTERISTICS:
201         A) LENGTH: 42
202         B) TYPE: nucleic acid
203         C) STRANDEDNESS: single
204         D) TOPOLOGY: linear
205         (ii) MOLECULE TYPE: genomic DNA
206         (iii) HYPOTHETICAL: no

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207      (iv) ANTI-SENSE: yes
208      (iii) SEQUENCE DESCRIPTION: SEQ ID NO: 13
209 CTCAGCATAG CTTGATAGT GATTCTAGT GATTCTAGAA GG      42
211 (2) INFORMATION FOR SEQ ID NO: 14:
212     (i) SEQUENCE CHARACTERISTICS:
213         (A) LENGTH: 12
214         (B) TYPE: nucleic acid
215         (C) STRANDEDNESS: single
216         (D) TOPOLOGY: linear
217         (ii) MOLECULE TYPE: genomic DNA
218         (iii) HYPOTHETICAL: no
219         (iv) ANTI-SENSE: no
220         (v) SEQUENCE DESCRIPTION: SEQ ID NO: 14
221 CGTTCTAGAA CCAATACAA CCAATACAA CGCTATCTG AG      42
223 (2) INFORMATION FOR SEQ ID NO: 15:
224     (i) SEQUENCE CHARACTERISTICS:
225         (A) LENGTH: 11
226         (B) TYPE: nucleic acid
227         (C) STRANDEDNESS: single
228         (D) TOPOLOGY: linear
229         (ii) MOLECULE TYPE: genomic DNA
230         (iii) HYPOTHETICAL: no
231         (iv) ANTI-SENSE: yes
232         (v) SEQUENCE DESCRIPTION: SEQ ID NO: 15
233 GAGTGCAGGC GGTTCGTT C      31
235 (2) INFORMATION FOR SEQ ID NO: 16:
236     (i) SEQUENCE CHARACTERISTICS:
237         (A) LENGTH: 11
238         (B) TYPE: nucleic acid
239         (C) STRANDEDNESS: single
240         (D) TOPOLOGY: linear
241         (ii) MOLECULE TYPE: genomic DNA
242         (iii) HYPOTHETICAL: no
243         (iv) ANTI-SENSE: no
244         (v) SEQUENCE DESCRIPTION: SEQ ID NO: 16
245 CCGTCACTCA CCAATACAA C      31
247 (2) INFORMATION FOR SEQ ID NO: 17:
248     (i) SEQUENCE CHARACTERISTICS:
249         (A) LENGTH: 11
250         (B) TYPE: nucleic acid
251         (C) STRANDEDNESS: single
252         (D) TOPOLOGY: linear
253         (ii) MOLECULE TYPE: genomic DNA
254         (iii) HYPOTHETICAL: no
255         (iv) ANTI-SENSE: no
256         (v) SEQUENCE DESCRIPTION: SEQ ID NO: 17
257 TACTGCTATG CCAATGATAT CAGTAACT A      31
259 (2) INFORMATION FOR SEQ ID NO: 18:
260     (i) SEQUENCE CHARACTERISTICS:

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/898,541

DATE: 07/24/2001

TIME: 11:18:14

Input Set : A:\Seq_1st.txt

Output Set: N:\CRF3\07242001\I898541.raw

L:22 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:23 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:42 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:57 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:72 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:87 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:102 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:117 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6